Studio One 2 Manual Addendum

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Introduction

This document is an addendum to the existing PreSonus *Studio One 2 Reference Manual* and is organized by functional areas in Studio One. Versions 2.5 and 2.6 offer numerous enhancements and features, making it necessary to readdress some of the features described in the *Reference Manual*.

For the sake of clarity, in some cases, entire sections from the existing manual have been reproduced and modified. For enhancements and entirely new features where the underlying core functionality has not changed, only the new information is presented.

For complete release notes please refer to http://studioone.presonus.com. We hope you enjoy all that Studio One now offers!

Version 2.6

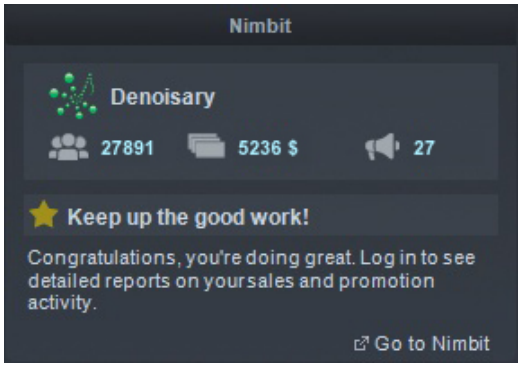
Pages

2.1 Start

The Studio One start Page offers new dashboards for accessing Nimbit and SoundCloud accounts.

2.1.8 Artist Profile

Nimbit Dashboard



Once you've set up an account, the Nimbit dashboard lets you have direct interaction with your fans and customers, as well as view various statistics, such as sales figures, active promotions, and the number of fans you have. The dashboard also features Help messages about how to boost sales and effectively engage with fans and customers.

Shows you how many fans you have.

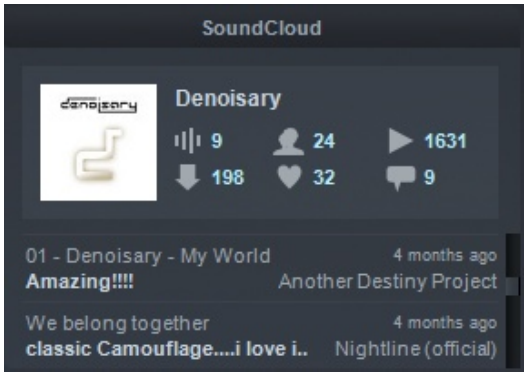
Tells you the value of your sales.

Displays the number of active sales promotion that you have.

The following icons appear in the lower half of the Nimbit dashboard whenever a Help message appears with suggestions about to promote your products and interact with your fans.

Clicking the text that appears to the right of the Help icon launches your web browser and takes you to your account on the Nimbit website at http://members.nimbit.com, which gives you further access to various account details, additional Help information.

SoundCloud Dashboard



Once your account is active, the SoundCloud dashboard will contain a scrolling display of the Activity Stream, and provide access to important account information and statistics using the following icons:

- Indicates the number of tracks that you have uploaded to your account.
- Shows you how many followers you have.
- Tells you how many times your songs have been played.
- Displays the number of downloads.
- The number of times your music has been marked as a Favorite by listeners.
- This icon shows the number of comments written by listeners.

You can go to your account on the SoundCloud website by clicking your username in the dashboard, where you can edit your details, and access additional Help information.

Setup

4.5 Managing Your Content

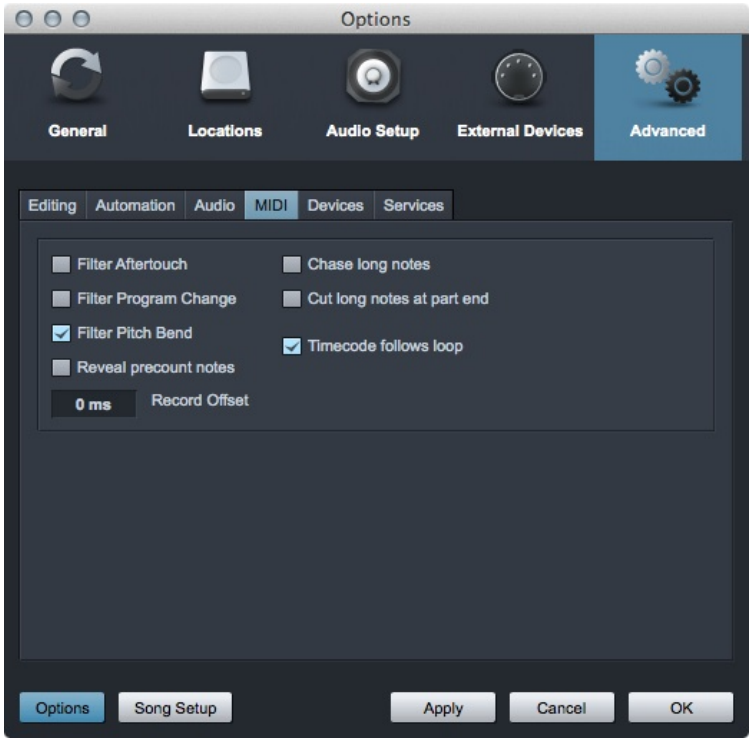
4.5.1.1 Autosave Restore Requests

Once you've told Studio One that you don't want to open or load an Auto-Saved song, it will be copied into the History, and you will no longer be asked if you "want to keep the backup as a version".

4.7 Advanced Options

4.7.4 MIDI – Pitch Filter

This filters all Pitch Bend messages from the MIDI Input.

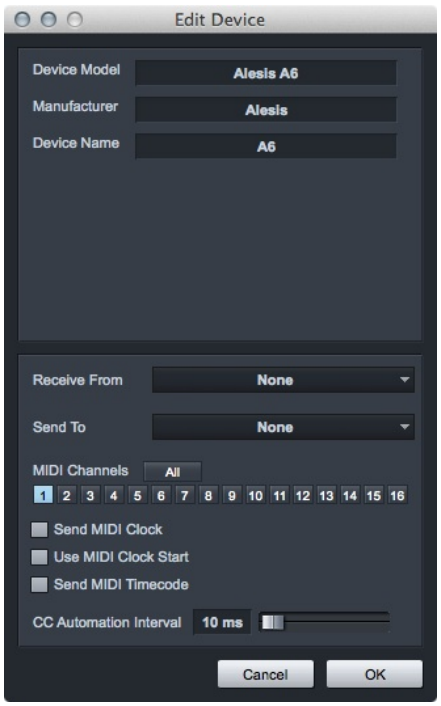


4.7.5 Plugin Devices

The Channel Editor will now remember the last plug-in device used when applying the "Device Editor Follows Channel Selection" or "Show Channel Editor" command (F11) option.

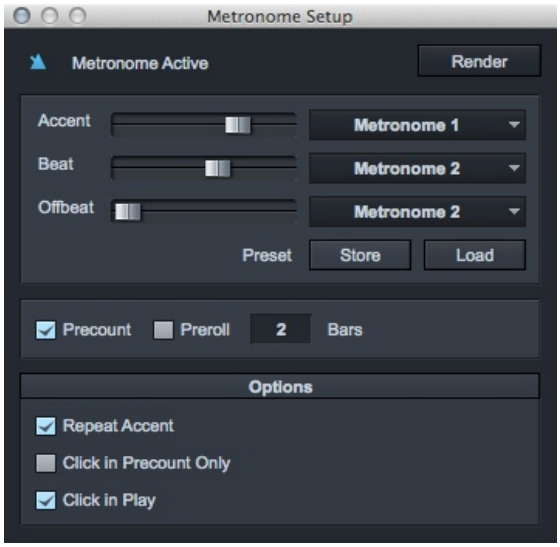
4.7.6 MIDI CC Transmit Rate (MIDI Controller Automation)

You can now vary the speed at which Automated MIDI CC messages are transmitted, using the Slider that has been added to the Device Edit Panel. The available range is from 10 – 100ms, with the default value being 10ms.



Recording

5.4 Metronome Control



5.4.2 Metronome Behavior

Studio One 2.6 offers eight new click samples for the Metronome.

5.4.4 Switchable Precount

This allows you to switch the Precount on and off. You can change this setting by opening the Metronome Settings and filling in the Precount checkbox. Alternatively you can go to the Transport, and click the Precount button located to the left of the Metronome Settings icon, or press [Shift]+[C] on your keyboard.

5.4.5 Use Custom Sounds in the Metronome

You can add your own samples to the list of available sounds by clicking the Add Sound option in the Metronome Sample list, or by dragging and dropping a sample on to one of the dropdown menus.

5.4.6 Visual Count-In

Whenever you begin recording with Precount switched on, the Record button will display a countdown for the duration of the Precount. For example, if the time signature is 4/4 and the Precount is 2 bars long, the display will count backward from 8.

5.4.7 Adjustable Offbeat

The Metronome also offers a click for the offbeat, with an adjustable volume and sample selection that allows you to choose a separate sound for the offbeat.

5.4.8 Repeat Accent

This setting repeats the Accent sound when using a time signature with more than one accent per bar, such as 12/8. You can try this out by doing the following:

1. Open the Metronome settings, and chose a sound for the Accent that is different from both the Beat and the Offbeat.
2. Leave the Repeat Accent checkbox empty.
3. Make sure the Click in Play option is active, so that you can hear the Metronome during playback.
4. Set the time signature to 12/8, and either click the Play button or press the Space Bar.

You'll notice the Accent is only heard every 12 beats. However, if you go through steps 3 and 4 with the Repeat Accent function switched on, the Accent will be heard ever 3 beats.

5.4.9 Click Presets

Once you have configured the Metronome, you can save the current setup as a preset by clicking the Store button. These presets can be recalled at any time by clicking the Load button.

5.4.10 Render Click

You can create an Audio track of the Metronome by clicking the Render button located in the upper-right corner of the Metronome Settings window, and choosing one of the Render range options. These options allow you to create a click track that is either the full length of your song, or just the length of a looped range within it, such as 4, 8, or 16 bars.

Enhanced Tempo Resolution

You can now set and adjust the Song Tempo with an accuracy of 1/10000th of a beat.

5.6 Instrument Track Recording Modes

5.6.3.1 Note Repeat Velocity Control Via Aftertouch

If Note Repeat is selected in the Record panel, you can now use Aftertouch to determine the velocity of repeated notes, which is a useful feature when programming drum rolls or fills.

Editing

6.11 Event Effects

6.11.11 Add Effects to Multiple Events

You can add Effects by dragging them from the Browser onto all selected Events.

6.12 Edit View Event Editing

6.12.2.4 Paint Tool (Music Editor)

Includes new options for adding notes with user-definable note-lengths that are independent of the grid.

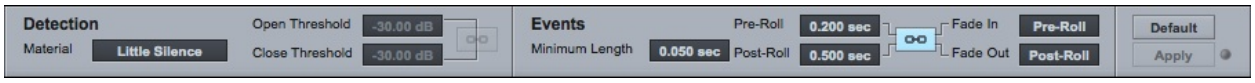
6.2 Arrange View Mouse Tools

6.2.1.4 Select Multiple Events

The options to "Select from Start to Event" ([Shift]+START) and "Select from Event to End ([Shift] + END), have been added to the Edit Menu.

6.4 Common Editing Actions

6.4.7 Strip Silence



The Fade-In and Fade-Out times can be linked to the Pre-Roll and Post-Roll using the new Link button found in the Strip Silence Panel.

6.8 Comping

6.8.1 Takes and Layers – Layer Follows Events

This option is now switched on by default.

6.8.4 Merge Events – Instrument Parts

The new Event is selected after you've merged Instrument Parts.

6.9 Transient Detection and Editing

6.9.2.2 Use the Bend Panel

The Stretch Events parameter is switchable and turned off by default when slicing an Audio Event (Action > Slice, with the Merge option activated).

Session Import

7.8 Importing Other Application Project Files

7.8.1 StudioLive/Capture Mix Import

When a Capture 2.1 session containing StudioLive AI mix data is opened in Studio One 2.6, all fader, pan, and mute settings are imported along with any Fat Channel settings, and a Fat Channel plugin is inserted on each channel. All Submix Busses including their channel routing are imported into Studio One as well. Empty FX Busses are created for each send effect and send levels per channel are imported. Pick any suitable reverb or delay Plug-in and manually adjust the FX Bus level and Plug-in settings to your taste.

See section 13.8.6 Native Fat Channel Native Plug-in *for more information about working with Fat Channel presets.*

Arranging

8.5 Bouncing

8.5.4 Bounce to New Track

You can create a new Audio track from a selected Instrument or Audio track which includes all Insert effects, by selecting Bounce to New Track from the Events menu, or pressing key command [Cmd]+[Alt]+[B] in Windows, or [Option]+[Cmd]+[B] under Mac OS X.

You can also right-click on an Event and choose the function from the Events sub-menu.

Mixing

9.1 The Console

9.1.8.5 FX Channel - Drag and Drop FX Chains to Send Slots

Dragging an FX Chain to the Send slot of a Track creates a new FX Channel with the same name as the FX Chain.

Note: F11 opens the Channel FX. Shift F11 opens the Instrument window of a selected Instrument Track.

9.2 Signal Routing

9.2.12 Send to an FX Channel

Dragging an FX Chain to the Send slot of a Track creates a new FX Channel with the same name as the FX Chain.

9.3 Groups

9.3.1 Create or Dissolve a Group

Dissolving a Group leaves only the first Track of the Group selected.

9.3.2 Group Behavior

Removing a Track from a Group deselects it.

9.4 Metering

9.4.5 System Performance Monitoring - Performance Monitor

The Performance Monitor displays the correct On/Off state for Instruments and Plugins. Double-clicking the name opens the device.

Expanded Remote hardware Support

Studio One 2.6 offers deeper integration with Mackie/HUI control hardware.

11 Control Link

11.1 Expanded Mackie Control/HUI Support

This now includes Control Link Mapping and Send slot navigation, with the ability to scroll through, and select from the lists of available plugins and instruments, and their presets. You can also control various Channel and Track parameters such as Mute/Solo, and FX Bypass (EQ button). Further information can be found in the Studio One Mackie Control Support Guide which is available for download from the Studio One webpage at http://studioone.presonus.com as well as the downloads section of your PreSonus account.

Mastering

12.2 Adding Tracks

Transport Bar – Track Time

The Transport Bar displays the current song location or Track Time (Time in Current Track), during playback.

12.2.7 CD Time Display

This shows the CD Length of your Project based on the total length of all included audio materials.

12.8 Publishing Your Project

384Khz Export Support

Songs at recorded at a sample rate of 384Khz can be exported as WAV, AIFF and FLAC files.

12.8.7 Nimbit Uploads as WAV File

The file format when publishing with the Nimbit option now defaults to WAV.

Built-In Effects

13.8 Mixing

13.8.6 Native Fat Channel Plug-in

This new plugin is a complete virtual version of the channel strip found on the StudioLive 32.4.2 AI mixer, which allows you to use all Fat Channel presets in both Studio One and on StudioLive AI. Newly added Presets from a StudioLive AI mixer are automatically added to the native Fat Channel presets list each time Studio One is launched.

Fat Channel Preset Interchange

This function lets you export Fat Channel presets from Studio One to a StudioLive AI Mixer using the Universal Control AI panel.

Clicking “Export Channel Preset”, located in the Preset Options menu of the Fat Channel plug-in header, saves the current preset to the Universal Control AI user preset folder, and it can be transferred to a StudioLive AI mixer.

Version 2.5

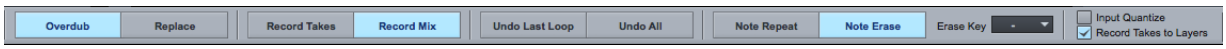
Arrangement

5.6 Instrument Track Recording Modes

There are several modes for recording to an Instrument track. To switch between these modes, navigate to the View menu and select the Record panel or press [Shift]+[Alt]/[Option]+[R] on the keyboard. In the Record panel, you can engage Record Mode Overdub or Record Mode Replace and Loop Record Takes or Loop Record Mix. The following describes each recording mode for Instrument tracks.

5.6.1 Record Mode Overdub and Replace

When in Overdub recording mode, recording over any existing Instrument part will result in the newly recorded material being overdubbed, or added to, the existing material. While recording, you will hear the previously recorded event playing, along with the material currently being recorded, assuming that you are monitoring the Instrument track.



When in the Replace recording mode, recording over any existing Instrument Part will result in the new material being recorded to a new event, which replaces that portion of the original event. While recording, you will not hear the previously recorded event playing back, as the purpose of this mode is to replace the existing material.

5.6.2 Loop Record Takes and Mix

If Loop is engaged in the Transport while recording, the recording mode will change to either Loop Record Takes or Loop Record Mix, depending on the selection in the Record panel. These modes are functionally similar to the regular Record Mode Overdub and Record Mode Replace.

When Loop Record Takes is selected, each pass through the looped region is recorded to a new take within a single new Instrument Part. When recording is stopped, each take is individually selectable by [Right]/[Control]-clicking on the Instrument Part and choosing one of the numbered takes from the top of the pop-up menu. Only one take can be selected at a time for any Instrument Part.

Takes on Instrument Parts can be unpacked to new Instrument tracks, as with Audio event takes, described in the Unpack Takes section of this chapter.

When Loop Record Mix is selected, each pass through the looped region is added to the existing material within a single, new Instrument Part. For instance, if you loop a four-bar region to record a new drum part, this would allow you to play one piece of the drum kit during each pass until you have recorded the whole part.

5.6.3 Note Repeat

If Note Repeat is selected in the Record panel, any notes played during the current recording pass will be repeated at the interval of the current Quantize value. Note that this mode cannot be combined with the Note Erase mode.

5.6.4 Note Erase

If Note Erase is selected in the Record panel, any notes played during the current recording pass will erase existing notes of the same note value. For instance, if you start recording a drum pattern, and the kick pattern is on C1 and has an extra eighth-note hit on beat 4, you could switch to Note Erase while recording and play C1 on beat 4 for one eighth-note, and that would erase the previously recorded note.

It is only possible to engage this mode if Record Mix is engaged and Note Repeat is disengaged; engaging Record Takes or Note Repeat will disable this mode.

You can also specify an Erase Key in the Record panel, which functions as a switch for Note Erase. While this key is held, Note Erase is active, and any notes played during the current recording pass will erase existing notes of the same note value. This can be more convenient than using the mouse to click on Note Erase to switch the mode.

6.8 Comping

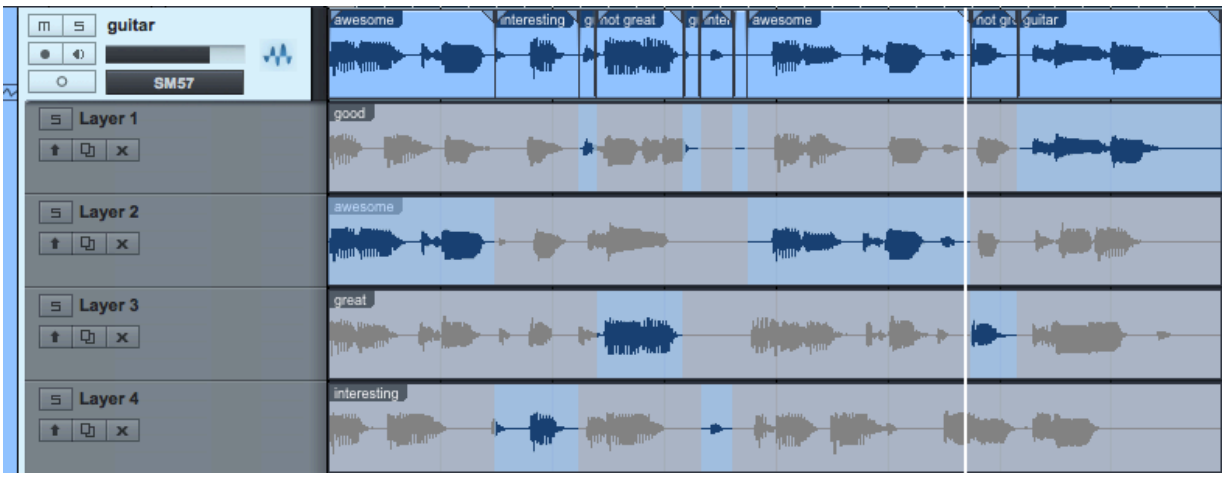
Comping is the process of piecing together multiple performances into a single, continuous performance. For instance, you might record the vocals for a verse a number of times, then edit the best parts of each pass into a single, hybrid performance that, ideally, sounds as though it was performed in one pass. Comping and related information are covered in the following sections.

6.8.1 Takes and Layers

The most common comping scenario involves recording multiple takes of audio and then editing those takes. In Studio One, takes can be recorded to layers, which are displayed as lanes directly under the track they belong to. You can activate the Record Takes To Layers option in the Record panel, opened with [Shift]+[Alt]/[Option]+[R], or by using the Options menu. With the Record Takes To Layers option engaged, all recordings will be placed on layers, with one layer per take, and the layers will be shown as soon as recording is stopped. The last recorded take will be placed on the track automatically. Note that this option also applies when recording Instrument Parts if the Record Takes option is engaged in the Record panel.

By [Right]/[Control]+Clicking on a track, you can choose Add Layer to manually add a layer at any time. You can then drag audio or MIDI to the layer just as you would drag it to the track. This allows some interesting creative comping possibilities beyond simply recording and editing.

To rename any layer, [Right]/[Control]+Click on it and double-click on the name to enter text (e.g., “great,” “not good,” “brilliant,” and so on). This is very helpful when organizing takes to be comped.



To hide or show layers, [Right]/[Control]-click on a track, and then click on Expand Layers. Layers have their own track controls, including Solo, Activate, Duplicate, and Remove. Click on the layer's Solo button to solo the layer on the track. Clicking on the Activate button will place that layer on the track, and the current contents of the track will take the place of that layer on a new layer located under the track. Duplicate will create a duplicate of the layer on a new layer. Remove will remove the layer from the track.

If you would like layers to follow the track event in the arrangement—for instance, when moved or duplicated—engage the Layers Follow Events option in the Inspector for the track.

6.8.2 Auditioning Takes

When comping, it is helpful to be able to quickly audition the various takes to determine the desired parts of each take. The Listen tool is well suited to auditioning takes on layers. When floating the mouse over any layer, hold [Alt]/[Option] and click anywhere on any layer to instantly hear it, starting from the point in time where you clicked. Alternatively, hold [Shift]+[Alt]/[Option] and click on a selected range on any layer to solo the layer; looping will be automatically engaged around the selected range for playback.

It is also possible to solo entire layers to quickly switch between takes, as only one layer of a track may be soloed at a time. To do this, click on the Solo button on any layer. Note that Track Solo is independent of this, so you can solo the track or not, depending on whether you would like to hear the performances you are comping in the context of the other tracks in your Song.

6.8.3 Copying Ranges to the Track

Studio One makes the comping process very simple. With the Arrow tool selected, floating the mouse over any layer will switch to a special Range tool, indicated with the Range cursor icon. Click-and-drag with this tool to instantly promote any range of a take to the track.

Once a range has been copied to the track, it will be highlighted in the track color so that you can always be sure where material on the track is coming from. Where a newly copied range overlaps with an existing range on the track, an automatic crossfade will be applied to help avoid clicks or other undesirable artifacts. This crossfade can be edited, just like any other, and it can be removed.

Any selected range on a layer can be sized left or right by floating the mouse cursor to the edge of the range and clicking and dragging, which will alter the track accordingly.

6.8.4 Comping With Groups

If one or more tracks are in a group, and comping is performed on any of those tracks, identical edits will be performed on the other tracks in the group. For instance, comping can be performed on a single track within a drum group, and those identical edits will be performed across the other tracks in the group. This applies to soloing, activating, and removing layers, as well.

While it may be best to avoid the scenario, comping can be performed across grouped tracks with a differing number of layers; layer positions under the tracks determine the behavior of the edits.

6.8.5 What Next?

After comping on an Audio track, it is common to consolidate, or bounce, separate Audio events into a single, continuous event. You can do this quickly by selecting the Audio events on the track and pressing [Ctrl]+[B] on the keyboard. This will render a new Audio file and event, and place it on the track at the correct position.

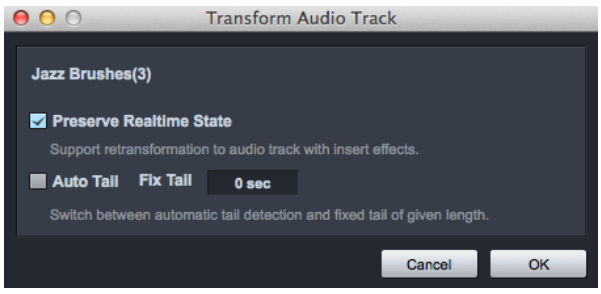
A more flexible way is to merge the separate Audio events into an Audio part by selecting the Audio events and then pressing [G] on the keyboard. Any comping performed under the range of the Audio part will result in the comps being copied directly into the Audio part.

6.10 Track Transform

6.10.1 Audio Track Transform

Audio tracks always have a directly related channel in the Mix Console on which insert effects can be configured. In the editing and arranging process, it is sometimes necessary to render an Audio track so that the insert effects become a part of the audio waveform on the track. You might do this for creative purposes or simply to enable you to remove the insert effects in order to save CPU power.

Studio One makes this incredibly simple with the Track Transform feature. With any Audio track that has effects inserted on its corresponding channel selected, [Right]/[Control]-click on the track and select Transform to Rendered Audio from the context menu.



Check Preserve Realtime State if you would like to be able to transform back to the original track. It is then possible to switch between Automatic Tail Detection, with a Max Length property, and a fixed tail of a given length by toggling the Auto Tail option. Auto Tail is useful if there is a reverb or

other effect that you will want to render beyond the event length on the track. Note that Auto Tail may not work well with lengthy delays or extremely long reverbs, as it works by detecting a range of silence at which to cut off and fade out the transformed audio. In that case, setting a fixed tail will be the best option.

Click OK, and the Audio track will be bounced, with its insert effects; then the original Audio track will replaced with the newly bounced audio on a new Audio track with the same name. If Auto Tail was engaged, or a Tail amount was specified, you will notice that fade-outs have been applied automatically across the specified Tail duration for each event. The insert effects will not be inserted on the new track, as they have been rendered into the audio on the track.

If you checked Preserve Original Track State, then it is possible to transform back to the original track, with effects inserted on the corresponding channel, by [Right]/[Option]-clicking on the track and selecting Transform to Realtime Audio from the context menu.

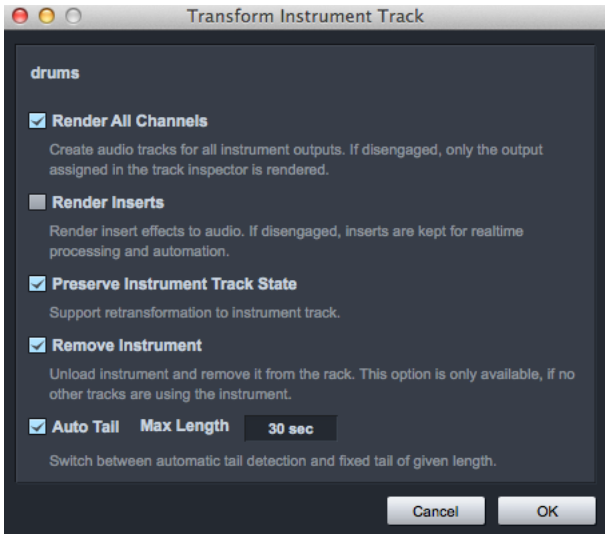
Track Transform will also maintain output routing and Send configuration between the original and new tracks, eliminating manual management of this aspect.

Note that it is possible to Transform multiple Audio tracks at once, in which case they will all be rendered simultaneously, which can be a huge time saver.

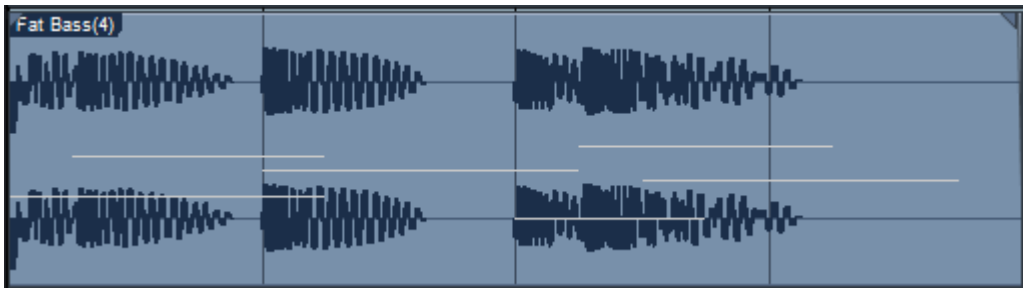
6.10.2 Instrument Track Transform

Instrument tracks contain MIDI music performances that control virtual instruments. The virtual instruments output to one or more audio channels in the Mix Console, and you can configure insert effects, sends, and output routings for the channels. With this approach, it can be difficult to render Instrument tracks to audio correctly.

Studio One makes it simple by transforming Instrument tracks into Audio tracks in one step. [Right]/[Control]-click on any Instrument track and select Transform to Audio Track from the context menu. You will then see several options in the pop-up menu:



- **Render All Channels.** If the connected Instrument has more than one audio output engaged, this option will appear. If this option is disengaged, only the channel related to the selected track will be rendered, as specified in the Track Inspector.
- **Render Inserts.** If you would like to render the insert effects on the related virtual instrument's output channel, check this option.
- **Preserve Instrument Track State.** If you would like to be able to transform from the new Audio track back to the original Instrument track, check this option.
- **Remove Instrument.** If you would like to remove the virtual instrument in order to save CPU power after rendering audio and creating the new Audio track, check this option.
- **Auto Tail.** Choose between automatic tail detection and a fixed tail of a given length, as described in Section 6.10.1.



If a Tail amount was specified, you will notice that fade-outs have been applied automatically across the specified Tail duration for each event. Also, the send configuration and output routing of the new Audio track will be identical to that of the original Instrument track.

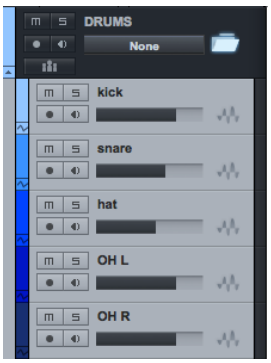
As with Audio tracks, it is possible to Transform multiple selected Instrument tracks at once, in which case they will all be rendered simultaneously, which can be a huge time saver.

8.8 Folder Tracks

Keeping the Arrange view organized can be critical to workflow, and Folder Tracks have traditionally helped in this area. Studio One's Folder Tracks also include grouping and busing options, extending improvements to editing and mixing workflow.

8.8.1 Create a Folder Track

When organizing existing tracks, the simplest method of placing the tracks into a new Folder Track is to select them all in the Track column, then [Right]/[Control]-click and choose Pack Folder from the contextual menu. This will create a new Folder Track and will place all of the selected tracks in it. Alternatively, you can drag-and-drop any track onto an existing Folder Track. It is also possible to create a Folder Track from the Add Tracks menu, just like any other track. Folder Tracks can contain Audio, Instrument, Automation, and even other Folder Tracks.

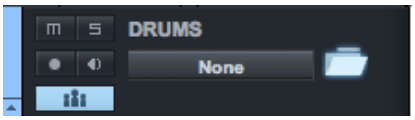


Clicking on the Folder icon on a Folder Track will show and hide the tracks within the Folder in the Arrange view.

Note that Folder Tracks also have Mute, Solo, Record, and Monitor Enable buttons. Clicking on these will engage the appropriate action for any track within the folder.

8.8.2 Folder Track Grouping

Clicking on the Group icon on a Folder Track will create a group with the name of the Folder Track and will place all tracks it contains into the group. This is exactly the same as selecting all of the tracks and grouping them with [Ctrl]/[Cmd]+G: The tracks will be selected together in the Mixer and Arrange views, and the events on the tracks will be edited together. If the group icon is engaged on a Folder Track, clicking on it again will remove the group.



If a track is already in a group prior to being placed in a Folder Track, and the Folder Track group is engaged, the track will be placed in the Folder Track group when it is placed in the Folder Track. If removed from the Folder Track, a track will retain its group setting.

8.8.3 Folder Track Editing

When a Folder Track is collapsed, you will see a single "event" with lanes representing each track in the Folder across the arrangement. It is possible to directly edit this consolidated event, including Size, Move, Cut, Copy, Paste, and Duplicate. This ability saves time in cases where simple edits do not require viewing a particular track in the Folder or even grouping the tracks within.

8.8.4 Folder Track Busing

Clicking on the Bus selection box to the right of the Group icon on a Folder Track will allow the selection or creation of a bus channel. Choose from an existing bus channel, or add a bus, to switch the output for all tracks contained in the Folder Track to a bus channel. If adding a new bus channel, the bus will take the name of the Folder Track.

If a bus selection is made, the Folder Track will act as an effects-drop target for the bus channel when dragging effects from the browser onto the Folder Track.

As with Folder Track grouping, if the Folder Track has a bus-channel selection, any track added to the folder will be routed to that bus when placed in the Folder Track. If removed from the Folder Track, a track will keep the bus as its output-channel selection.

For Instrument tracks, the track's related audio channel will be routed to the Folder Track bus channel. The related audio channel is the one shown in the Inspector under the Out and In selections for an Instrument track. As noted elsewhere in this manual, the Audio selection for an Instrument track is purely organizational and allows Studio One to accomplish workflow enhancements like the aforementioned. If a virtual instrument is using multiple output channels, you should take the time to organize which Instrument tracks routed to that virtual instrument are related to which output channels in the Inspector.

8.8.5 Folder Track Nesting

When Folder Tracks are nested—that is, when one Folder Track is placed inside another—the Folder Track grouping and busing options still only apply for the tracks within each folder. Here is an example:

Tracks 1 through 8 are in Folder Track A, which has Group enabled and is routed to Bus A. Tracks 9 through 12 are packed to a new Folder B, Group is enabled there, and a new Bus B is created. Folder B is then dragged into Folder A. The tracks in Folder B are still grouped in Group B and are still routed to Bus B. The only difference is organizational: Hiding Folder A tracks will also hide Folder B.

10.3 Editing Automation Envelopes

Automation envelopes can be edited directly, using the mouse, as well as with external hardware controllers. The following describes editing automation envelopes with the mouse. Refer to the Automation with Hardware Controllers section of the “Control Link” chapter for more on editing envelopes with external hardware controllers.

To edit an automation envelope, you first need to show automation by clicking on the Show Automation button at the top of the Track column or by choosing Expand Envelopes from the Track contextual menu. A track must also be selected in order for the automation envelope points to appear.

10.3.1 Arrow Tool

Editing an automation envelope with the mouse, using the Arrow tool, allows you to add new points to the envelope, move existing points, and select and delete existing points. Be sure to select the Arrow tool in the Arrange view before attempting the following processes.

10.3.2 Add a New Automation Point

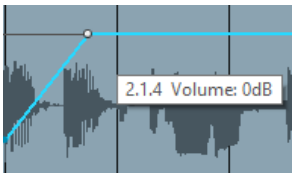
To add a new point to an automation envelope using the Arrow tool, float the mouse above the envelope in the Track Lane so that the Hand cursor appears. Click to create a new point, hold the click, and move the mouse to move the new point.

10.3.3 Move an Automation Point

To move any point on an automation envelope, using the Arrow tool, click-and-hold on any existing point on the envelope. While holding, moving the selected point vertically changes its parameter value, and moving the point horizontally changes its time position. Hold [Cntrl]/[Cmd] while dragging an automation point to lock the time (horizontal movement) or value (vertical movement), depending on the distance from the point.

Automation points can also be nudged left and right on the timeline by holding [Alt]/[Option] and using the left and right arrow keys. It is also possible to float the Arrow tool over an envelope point and then hold [Alt]/[Option] and scroll the mouse wheel up or down to increase or decrease the value of the point (that is, move it along the vertical axis).

When moving an automation point, notice the pop-up value indicator.



This displays the current parameter value. The range and the type of value depend on the parameter being automated and on the current time value displayed in the Timebase selected in the Arrange view.

[Right]/[Option]-click on any automation point to bring up the contextual menu, where the point value and envelope color can be changed.

In Studio One, you can drag an automation point as far beyond the position of other automation points as needed. Moving an automation point beyond other points on the envelope will cause the other points to move as well. The other points being moved will be restored to their original positions on the timeline if the point that caused them to be moved is moved back beyond their original positions.

Note that when Audio events or Instrument parts are moved, any underlying track automation will be moved along with the events, by default. To disengage this option, see the Studio One/Options/Advanced/Automation menu and uncheck the Automation Follows Events option.

10.3.4 Delete an Automation Point

To delete an existing point on an automation envelope using the Arrow tool, first click on a point to select it. Then, press [Delete] on the keyboard to delete the point. Alternatively, [Right]/[Control]-click on any automation point and select Delete from the pop-up menu to delete it.

10.3.5 Editing Multiple Points at Once

It is possible to simultaneously edit any number of points on an automation envelope. Using the Arrow tool, click in the Track Lane, away from any existing automation point, and then drag to draw a selection box around the points you want to edit. You can also hold [Alt]/[Option] and double-

click in empty space, or directly on a point, to select all points on the envelope from that point in time forward.

With multiple points selected, click-and-drag, using the Arrow tool, on any of the selected points, in order to move them all. Moving multiple points vertically to adjust the parameter values will adjust each parameter value relative to the point being moved.

10.3.6 Paint Tool

Editing an automation envelope with the Paint tool allows you to draw many automation points with a single move of the mouse, effectively painting an envelope. However, a single click with the Paint tool will add a single point.

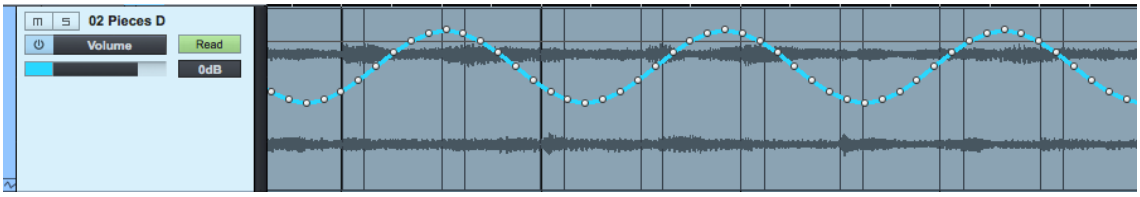
You can choose from several figures when using the Paint tool, or you can use the Transform editor, as described in the following subsections. Be sure to Show Automation and select the Paint tool in the Arrange view before attempting the following processes.

10.3.6.1 Draw an Automation Envelope

To draw an automation envelope using the Paint tool, click-and-drag in the Track Lane. While you are drawing the envelope horizontally, points will be added at different time increments based on the current Timebase. However, when the mouse button is released after drawing an envelope with the Paint tool, the drawn curves of the envelope will be intelligently and accurately approximated to achieve the desired result with as few points as possible, which may or may not remove some unnecessary points from the envelope. If Snap is engaged in the Arrange view, the envelope points being drawn will snap to the grid accordingly.

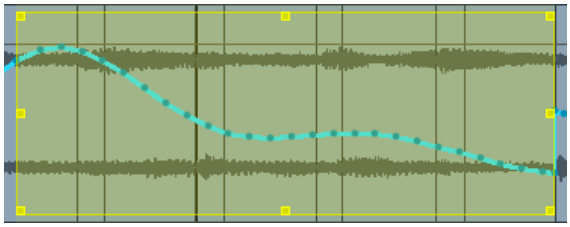
Drawing an envelope with the Paint tool over existing points on an automation envelope will cause the existing points to be overwritten with the newly drawn points. These actions can be undone and redone.

10.3.6.2 Draw with Figures



When selecting the Paint tool, scroll the mouse wheel to reveal several figure-drawing tools, including a Line tool and Square, Saw, Triangle, and Sine waveform tools. With any of these tools selected, click-and-drag on any automation envelope to draw the desired envelope. When using the waveform tools, hold [Alt] to adjust the frequency of the waveform while dragging.

10.3.6.3 Transform Automation

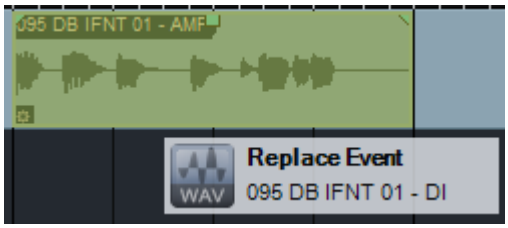


You can also choose the Transform tool from the Paint tool drop-down list to alter existing automation, or add new automation. With the Transform tool selected, click-and-drag a selection box around any area of an automation envelope; then adjust the selection box by clicking-and-dragging on one of eight handles (four sides and four corners) to scale the selected automation points.

This tool is unique to Studio One and can be used to create automation-envelope patterns that otherwise would be impossible to create.

Browser/Drag-and-Drop

While dragging audio into the arrangement from the Browser, you can replace the audio clip associated with an event by holding [Alt]/[Option] and dropping the audio onto an event. This will effectively swap out the existing audio with the new audio, wherein the edits to the event will stay intact.



If you would like to insert multiple audio clips, selected in the browser, to the same track, with one placed after the other across the timeline, hold [Cntrl]/[Cmd] while dragging the audio clips to empty space on a track. This is really helpful if you want to quickly drag in multiple variations of similar audio or for laying out an entire song structure in one move.

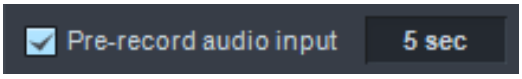
When dragging in effects from the browser onto tracks in the arrangement, hold [Alt]/[Option] to load the effects as Event Effects instead of Insert Effects. Note that the drop target will change from the entire track to specific events when doing this, as every event can have its own Event Effects.

When merging mono files to stereo in the browser using the [Right]/[Option]-click menu, the files will be merged consecutively (first selected file becomes L channel, second becomes R channel) when the suffix .L or .R is not found.

Audio Engine

Pre-Record

Pre-Record is a global setting found in the Studio One/Options/Advanced/Audio menu that allows any live input to be recorded, audio or MIDI, while record is not running. This option is disengaged by default, and a length up to a maximum of one minute can be specified.

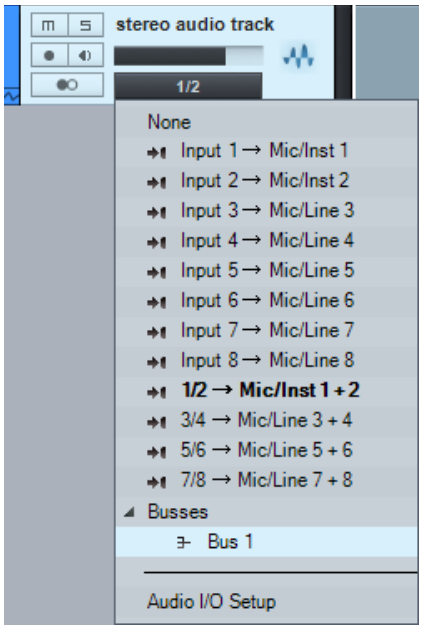


The recorded data is collected in the input channels as long as physical inputs are connected. After recording with Pre-Record enabled, you can reveal that data by pulling the event-start handle to the left. If recording restarts on the same track, the Pre-Record data is limited to the last recording's end, so that data is not repeated and a seamless join between the two recordings is possible.

This option can be a lifesaver. Let's say you started a punch-in late; no worries, you can drag the event-start handle to the left, to a point before you where started recording. If you thought you were recording but you were not, you could simply start recording, immediately stop recording (to create an event), then size the new event back in time to reveal the pre-recorded audio.

Re-Record

Instrument Output, Bus, and ReWire channels can be selected as the input to any stereo Audio track. These channels are grouped in branches in the input selection menu for the Audio track.



This is very useful in a number of situations in which you would like to "print" the live output of one of those channel types (live virtual instrument recording to audio, hybrid analog mixing, etc.).

FX Set

- A Mix parameter has been added for all Dynamics and Distortion effects, making parallel processing very easy.
- Send FX Mix Lock
    - Inserting an effect into the first slot of a bus/FX channel sets dry/wet mix to 100% and enables a lock for the mix. The lock state is saved in the Song but is not overwritten/saved by presets. This exists in:
        - Beat Delay
        - Analog Delay
        - Groove Delay
        - MixVerb
        - Room Reverb
- Ampire XT
    - An input-trim-lock has been added, which can help prevent presets from changing input gain.
    - NOTE: Old songs will not sound the same with Ampire XT in 2.5, so be sure to either finish the Song in a previous version, bounce the audio, or be prepared to re-create the sound you previously had. All previous versions can be found here: http://download.presonussoftware.com/studioone/
- Spectrum Meter
    - Sonogram and Waterfall Modes with freeze have been added.
    - FFT Curve Mode added.
    - Larger maximum FFT-sizes are now available.
    - Sidechain input added, which can be used for comparison.
    - Note + Cent tooltip added for frequencies.
- ProEQ
    - Waterfall- and Curve-Mode added.
    - Sidechain input added, which can be used for comparison.
    - Note + Cent tooltip added for frequencies.
    - The controls can be hidden, so that only the EQ curves are shown, by clicking on the Up Arrow icon in the center, between the curve and control panels.
- Chorus
    - Chorus has two modes, with up to two internal voices:
        - Doubler is equivalent to pre-2.5 versions of Studio One.
        - Chorus has standard chorus behavior with inverse all-pass movement.
            - Multi-FX Units (e.g., Ampire and Presence) now use standard Chorus mode instead of Doubler.
    - There are now four selectable LFO waveforms: triangle, sine, sawtooth, and square.
- Multiband Dynamics
    - New phase-corrected summing.
    - Added Dry/Wet mix control.

Music Editor

Legato and Overlap Correction

- When editing notes in the Music Editor, the "Length" dialog contains three new modes:
    - Legato: Note lengths are enlarged until they reach the desired overlap with the next event. Note lengths are never shortened.
    - Overlap correction: Note lengths are shortened if there is an overlap with another note.
    - Legato + Overlap correction: All note lengths are set to the start of the next note.
- The desired overlap range with each mode can be set with the slider and/or text field.

Percent/MIDI Resolution Switch

- Representation of velocity and controller values can be switched between percent (0-100) and MIDI resolution (0-127) using a contextual menu on the envelope scale in the Music editor.

Other

Project Page Metering

The Project page metering section now includes Sonogram and Waterfall metering, in addition to Octave, Third Octave, and FFT modes.

Add Tracks Dialog

The Add Tracks dialog now has additional options for Audio and Instrument tracks to make I/O connections directly. When creating multiple tracks at once, I/O ports can be assigned in ascending order. This helps, for instance, to quickly create Audio tracks for recording as an alternative to "Add Tracks for All Inputs." This is also helpful when working with multitimbral instruments, where with one action you might create 16 instrument tracks at once, with each track connected to individual MIDI channels.

Song Notes

Simple text notes can be kept for any Song in the Song/Song Information Notes tab. Text entered here will not appear in any metadata for the Song and is meant purely for personal organization and task management.

Remaining Record Time

In the Song View menu, you will find a Remaining Record Time display that lets you know exactly how much time you have left to record onto the hard disk. If your monitor resolution is wide enough, the remaining record time is shown in the Transport panel, as well, between the sample-rate value and secondary time display.

The color of the Remaining Record Time display changes to red when the hard disk is nearly full. When the hard disk is full, an alert message will pop up, and recording will be stopped automatically.

Versions

Since the initial release of Studio One 2, the feature comparisons between versions have changed, most notably with the release of Studio One Free. Here is the updated version comparison chart.

	STUDIO ONE 2 FEATURES	FREE	ARTIST	PRODUCER	PROFESSIONAL
	Elegant single-window work environment	●	●	●	●
	Powerful drag-and-drop functionality	●	●	●	●
	Unlimited audio tracks, MIDI tracks, virtual instruments, buses, and FX channels	●	●	●	●
NEW!	Integrated Melodyne pitch correction		Trial	Trial	●
NEW!	Single and multitrack comping	●	●	●	●
NEW!	Editable Folder tracks with grouping and busing		●	●	●
NEW!	Track List with presets and mixing Console link	●	●	●	●
	Content Browser with search, user tabs and Preview Player	●	●	●	●
NEW!	Transient detection and editing		●	●	●
NEW!	Drag-and-drop groove extraction		●	●	●
NEW!	Multitrack MIDI editing	●	●	●	●
NEW!	Multitrack Track Transform (advanced freezing capability)	●	●	●	●
NEW!	Event-based Effects		●	●	●
NEW!	Macro Toolbar (user-definable/shareable macro commands)		●	●	●
NEW!	Nimbit Extension (market and sell your music)		●	●	●
	Automatic delay compensation	●	●	●	●
	Advanced automation	●	●	●	●
	Audio processing 64-bit 32-bit	32-bit	32-bit	32-bit	64-bit
	Easy-to-use sidechain routing	●	●	●	●
	Stunning virtual instruments	Presence	●	●	●
	User-friendly sampler		●	●	●
	Most intuitive MIDI-mapping system available	●	●	●	●
	Real-time audio timestretching and resampling	●	●	●	●
	Compatible with any ASIO-, Windows Audio-, or Core Audio-compliant audio interface	●	●	●	●
	Works with key commands from Pro Tools, Cubase, and Logic—or create your own key commands	●	●	●	●
	Integrated mastering suite with automatic mix updating, Red Book CD burning, and digital release				●
	Export to SoundCloud				●
	QuickTime Video playback and sync				●
	MP3 import and export			●	●
	AU, VST2, VST3, and ReWire support			●	●

	STUDIO ONE 2 NATIVE EFFECTS PLUG-INS	FREE	ARTIST	PRODUCER	PROFESSIONAL
	Ampire XT Amplifier-Modeling	Limited	●	●	●
	Analog Delay Tape-Delay Emulation		●	●	●
	Auto Filter Envelope Filter		●	●	●
	Beat Delay Tempo-Synchronized Delay	●	●	●	●
	Binaural Pan Stereo Panning Effect		●	●	●
	Channel Strip Dynamics Processing and Equalizer	●	●	●	●
	Chorus Mono/Stereo Chorus	●	●	●	●
	Compressor Mono/Stereo Variable Compressor		●	●	●
NEW!	**Dual Pan** Independent Stereo Panner		●	●	●
	Expander Mono/Stereo Expander		●	●	●
	Flanger Mono/Stereo Flanger	●	●	●	●
	Gate Noise Gate with MIDI Trigger		●	●	●
	Groove Delay Multitap and Tempo-Synchronized Delay				●
NEW!	**IR Maker** Impulse Response Creation Tool				●
	Level Meter Sizable Peak/RMS Meter		●	●	●
	Limiter Mono/Stereo Limiter		●	●	●
	Mixtool Phase and MS Utility		●	●	●
	MixVerb Mono/Stereo Reverb	●	●	●	●
	Multiband Dynamics Mono/Stereo Multiband Compressor/Expander				●
NEW!	**OpenAIR** Convolution Reverb				●
	Phaser Variable Phaser with LFO Modulation	●	●	●	●
	Phase Meter Phase-Correlation Analysis		●	●	●
	Pipeline Hardware Insert (use external hardware processor, with scope and delay compensation)				●
	Pro EQ 7-band Parametric EQ		●	●	●
	Red Light Dist Distortion Processor	●	●	●	●
	Room Reverb Mono/Stereo Room Reverb		●	●	●
	Scope Full-featured Oscilloscope with Sidechain Input		●	●	●
	Spectrum Meter Frequency Analyzer		●	●	●
	Tricomp 3-band Compressor		●	●	●
	Tuner Chromatic Instrument Tuner	●	●	●	●
	X-Trem Mono/Stereo Tremolo		●	●	●
	Total number of native effects Plug-Ins	9	26	26	31